

Sesson: Symposium

Sesson Title: Chronic Obstructive Pulmonary Diseases: Recent Advances

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Abstract Title: COPD: A Threatening Global Disease

Abstract Text:

COPD is a leading cause of morbidity and mortality worldwide. The World Health Organization estimated that COPD is currently the seventh leading cause of death and disability worldwide, and that it will rise to the fifth position by 2020. The first step of controlling COPD is a quantifying COPD prevalence through the well-designed survey to estimate the burden of the disease accurately.

The best prevalence data for COPD came from the USA NHANES III study. The prevalence of COPD diagnosed by spirometry among subjects older than 17 years was 6.8% and increased with increasing age. In Europe, the prevalence varied from 3.7% in Denmark to 11% in Italy.

In recent years, several COPD prevalence surveys were conducted in Asia. In Korea, the survey involving 9,243 adults over the age of 18 years were performed from 2001 to 2002. The prevalence of COPD based on Global Initiative for Chronic Obstructive Lung Disease (GOLD) criteria was 17.2% (men, 25.8%; women, 9.6%) among subjects older than 45 years. In Japan, the Nippon COPD Epidemiology (NICE) Study including 2343 subjects was performed in 2000. The prevalence of airflow limitation in Japan was 10.9% (men, 16.4%; women, 5.0%) among subjects older than 40 years. From the survey enrolling 3449 subjects in 2002, the prevalence of COPD in Guangdong Province of China was 9.4% (men, 16.4%; women, 5.0%) among subjects older than 40 years.

Recently reported pooled prevalence by spirometry estimate from MEDLINE literature search was 8.9% in worldwide.

From reviewing the results of these surveys, several points shared by Asian countries are noticed. Above all, the prevalence of COPD in Asian countries is not lower than those in western countries. The prevalence is higher in male and in elderly. In addition, COPD is more common in rural area probably due to a synergistic effect of smoking and combustion of biomass fuel. Furthermore, the high prevalence of COPD revealed through the surveys suggested that only small portion of subjects with COPD is diagnosed and treated in Asia.

The burden of COPD is increasing in the USA despite of decreased smoking population as the effects of smoking take some time to develop symptoms. Because of the increasing prevalence of smoking as well as the considerable indoor and outdoor air pollution, the burden of COPD will increase more dramatically in Asian countries than Western countries. There is urgent need of education for increased awareness of COPD and enhanced screening efforts in high-risk population.